

Read this instruction sheet to make sure of correct operation before starting installation, operation, maintenance, and inspection of the GT3W series timers. The end user should keep this instruction sheet for future reference.

●TIME SPECIFICATIONS

Time Specification Code: 1			Time Specification Code: 3		
Time Range Selector	Scale	Time Range	Time Range Selector	Scale	Time Range
1S	0-1	0.1sec - 1sec	1S	0-3	0.1sec - 3sec
10S		0.3sec - 10sec	1M		3sec - 3min
10M		15sec - 10min	1H		3min - 3hours
1S	0-6	0.1sec - 6sec	1S	0-30	0.6sec - 30sec
10S		1sec - 60sec	1M		36sec - 30min
1M		6sec - 6min	1H		36min - 30hours
10M		1min - 60min			
1H		6min - 6hours	10H		6hours - 300hours

*The Scale is interlocked and replaced with the Time Range Selector. The time range is calibrated at its maximum time scale, therefore it is desirable to use the timer at a setting as close to its maximum time scale as possible for accurate time delay. For a more accurate time delay, adjust the control knob by measuring the operating time with a instrument before application.

●GENERAL SPECIFICATIONS

Operation System	Solid-state CMOS circuit	
Operation Type	Multi-Mode	
Time Range	1: 0.1sec to 6hours, 3: 0.1sec to 300hours	
Pollution Degree	2 (IE60664-1)	
Over voltage category	III (IE60664-1)	
Rated Operational Voltage	AF20	100-240V AC(50/60Hz)
	AD24	24V AC(50/60Hz)/24V DC
Voltage Tolerance	AF20	85-264V AC(50/60Hz)
	AD24	20.4-26.4V AC(50/60Hz)/21.6-26.4V DC
Disengaging value of Input Voltage	Rated Voltage × 10% minimum	
Range of ambient Operating Temperature	-10 to +50°C (without freezing)	
Range of ambient Storage and Transport Temperature	-30 to +70°C (without freezing)	
Range of Relative Humidity	35 to 85%RH (without condensation)	
Air Pressure	80kPa to 110kPa (Operating) 70kPa to 110kPa (Transport)	
Reset Time	60msec maximum	
Repeat Error	±0.2%, ±10msec*	
Voltage Error	±0.2%, ±10msec*	
Temperature Error	±0.6%, ±10msec*	
Setting Error	±10% maximum	
Insulation Resistance	100MΩ minimum (500V DC)	
Dielectric Strength	Between power and output terminals: 2000V AC, 1 minute Between contacts of different poles: 2000V AC, 1 minute Between contacts of the same pole: 750V AC, 1 minute	
Vibration Resistance	10 to 55Hz amplitude 0.75mm 2 hours in each of 3 axes	
Shock Resistance	Operating extremes: 98m/sec ² (Approx. 10G) Damage limits: 490m/sec ² (Approx. 50G) 3 times in each of 3 axes	
Degree of Protection	IP40 (enclosure), IP20 (socket) (IEC60529)	
Power Consumption (Approx.)	AF20 100V AC/60Hz	2.3VA
	200V AC/60Hz	4.6VA
	AD24(AC/DC)	1.8VA/0.9W
Mounting Position	Free	
Outline Dimensions	40H × 36W × 70.0D mm	
Weight (Approx.)	72g	

* The value of the error over a preset time applies the value of which or the larger one.

●APPLICABLE STANDARD

Safety standard UL508, CSA C22.2 No.14, IEC61812-1, EN61812-1
EMC IEC61812-1, EN61812-1

Electrostatic Discharge	level 3 Contact±6kV, Air±8kV	IEC61000-4-2 EN61000-4-2
Electromagnetic Field	level 3 10V/m, AM 80%, 80M-1000MHz	IEC61000-4-3 EN61000-4-3
Fast Transient/Burst	level 3 Power Supply: ±2kV	IEC61000-4-4 EN61000-4-4
Surge	AF20 level 3 Power Supply: Line to Line ±1.0kV Line to Ground ±2.0kV	IEC61000-4-5 EN61000-4-5
	AD24 level 2 Power Supply: Line to Line ±0.5kV Line to Ground ±1.0kV	
Radiated Emission	Group 1 Class A	CISPR 11 EN55011

Safety Precautions

Special expertise is required to use the Electronic Timer.

- All Electronic Timer modules are manufactured under IDEC's rigorous quality control system, but users must add a backup or fail safe provision to the control system using the Electronic Timer in applications where heavy damage or personal injury may be caused in case the Electronic Timer should fail.
- Install the Electronic Timer according to instructions described in this instruction sheet and the catalog.
- Make sure that the operating conditions are as described in the catalog. If you are uncertain about the specifications, contact IDEC in advance.
- In this instruction sheet, safety precautions are categorized in order of importance to Warning and Caution.

Warning Warning notices are used to emphasize that improper operation may cause severe personal injury or death.

- Trun power off to the Electronic timer before starting installation, removal, Wiring, maintenance, and inspection on the Electronic Timer. Failure to turn power off may cause electrical shocks or fire hazard.
- Emergency stop and interlocking circuits must be configured outside the Electronic timer. If such a circuit is configured inside the Electronic Timer, failure of the Electronic timer may cause disorder of control system, or accidents.

Caution Caution notices are used where inattention might cause personal injury or damage to equipment.

- The Electronic Timer is designed for installation in equipment. Do not install the Electronic Timer outside equipment.
- Install the Electronic Timer in environments described in this instruction sheet and the catalog. If the Electronic Timer is used in places where the Electronic Timer is subjected to high-temperature, high-humidity, condensation, corrosive gases, excessive vibrations, and excessive shocks, then electrical shocks, fire hazard, or malfunction will result.
- Use an IEC60127-approved fuse and circuit breaker on the power and output line outside the Electronic Timer.
- Do not disassemble, repair, or modify the Electronic Timer.
- When disposing of the Electronic Timer, do so as an industrial waste.

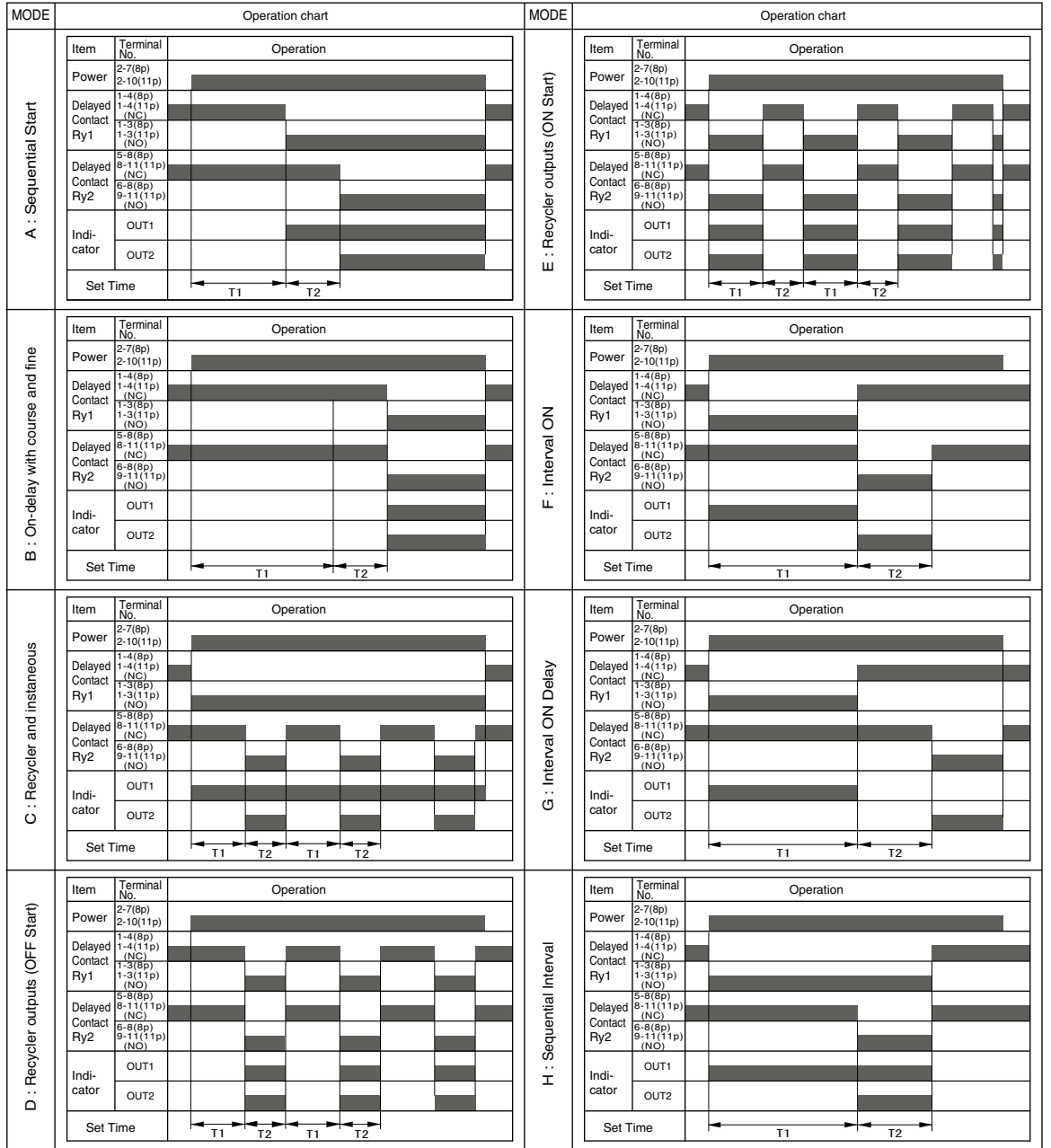
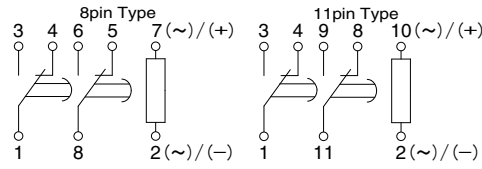
●TYPES

Operation Mode	Type	Time Specification Code	Rated Voltage Code	Output	Contact	Type No.	
						8-pin Type	11-pin Type
A: Sequential Start	GT3W-A [*1]*2[*3] N	1: 0.1sec - 6hours 3: 0.1sec - 300hours (See the Time specification for details.)	AF20: 100 to 240V AC (50/60Hz) AD24: 24V AC(50/60Hz)/24V DC	3A, 240V AC 5A, 120V AC/30V DC (Resistive Load)	Delayed SPDT + Delayed SPDT	GT3W-A11AF20N	GT3W-A11EAF20N
B: On-delay with course and fine						GT3W-A11AD24N	GT3W-A11EAD24N
C: Recycler and instantaneous						GT3W-A13AF20N	GT3W-A13EAF20N
D: Recycler outputs (OFF Start)						GT3W-A13AD24N	GT3W-A13EAD24N
E: Recycler outputs (ON Start)						GT3W-A31AF20N	GT3W-A31EAF20N
F: Interval ON						GT3W-A31AD24N	GT3W-A31EAD24N
G: Interval ON Delay						GT3W-A33AF20N	GT3W-A33EAF20N
H: Sequential Interval						GT3W-A33AD24N	GT3W-A33EAD24N

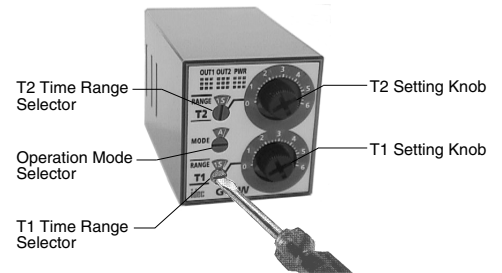
*1 The sign of the time specification T1 enters.

*2 The sign of the time specification T2 enters.

*3 The specification sign of Rated Voltage Code enters.

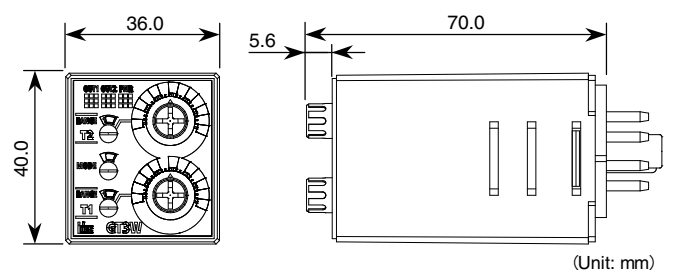
●OPERATION CHARTS

●INTERNAL CONNECTIONS

●CONTACT RATINGS

Allowable Contact Power	960VA/120W	
Allowable Voltage	250V AC/150V DC	
Allowable Current	5A	
Maximum permissible operating frequency	1800 cycles per hour	
Rated Load	1/8HP, 240V AC 3A, 240V AC (Resistive) 5A, 120V AC/30V DC (Resistive)	
Conditional Short Circuit	Fuse 5A, 250V	
Life	Electrical	100,000 op. minimum (Resistive)
	Mechanical	20,000,000 op. minimum

●SWITCH SETTING


(1) The switches should be securely turned using a flat screwdriver 4mm wide maximum. Note that incomplete setting may cause malfunction. The switches, which do not turn infinitely, should not be turned beyond the limits.

(2) Since changing the setting during timer operation may cause malfunction, power should be turned off before changing the setting.

●DIMENSIONS


(Unit: mm)